

## EAST Search History / Interference Search

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	40	blocked mercaptosilane	US-PGPU B; USPAT	ADJ	OFF	2006/11/16 08:54
L2	10496	acid acceptor	US-PGPU B; USPAT	ADJ	ON	2006/11/16 08:55
L3	2	I2 and I1	US-PGPU B; USPAT	ADJ	ON	2006/11/16 08:55

CAS ONLINE PRINTOUT

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(FILE 'HOME' ENTERED AT 07:55:18 ON 16 NOV 2006)

FILE 'REGISTRY' ENTERED AT 07:55:31 ON 16 NOV 2006

FILE 'CPLUS' ENTERED AT 07:55:43 ON 16 NOV 2006  
E US20050245754/PN

L1 1 S E3

L2 1 S L1

L3 24159 S SILANES/IT

L4 18691 S COUPLING AGENTS/IT

L5 5555 S L3 AND L4

S 79-03-8/REG# OR760-67-8 OR 1499-21-4/IT

FILE 'REGISTRY' ENTERED AT 08:01:31 ON 16 NOV 2006

L6 1 S 79-03-8/RN

FILE 'CPLUS' ENTERED AT 08:01:31 ON 16 NOV 2006

L7 4106 S L6

L8 575 S (79-03-8 OR760-67-8 OR 1499-21-4)/IT

L9 1 S L8 AND L5

L10 23490 S TERTIARY AMINE#

L11 22 S L10 AND L5

L12 7496 S (102-69-2 OR 109-02-4 OR 102-82-9)/IT

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L13 8 L12 AND L5

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L9 1 S L8 AND L5

L10 23490 S TERTIARY AMINE#

L11 22 S L10 AND L5

L12 7496 S (102-69-2 OR 109-02-4 OR 102-82-9)/IT

L13 8 S L12 AND L5

=> d bib abs 1-8

L13 ANSWER 1 OF 8 CPLUS COPYRIGHT 2006 ACS on STN

AN 2006:74746 CPLUS

DN 144:171900

## CAS ONLINE PRINTOUT

TI Method for improved melt flow rate of filled polymeric resin  
 IN Dombrowski, Thomas; Hrizuk, Stephen Andrew  
 PA Specialty Minerals (Michigan) Inc., USA  
 SO U.S. Pat. Appl. Publ., 9 pp.  
 CODEN: USXXCO

DT Patent  
 LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2006020056	A1	20060126	US 2004-897649	20040723
	WO 2006012505	A1	20060202	WO 2005-US26023	20050722
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
PRAI	US 2004-897649	A	20040723		

AB The method comprises surface treating a filler (e.g., calcium carbonate) with a dispersant and an amine (e.g., triethanolamine); and compounding the surface-treated filler with a polymer resin (e.g., low-d. polyethylene). The filled polymer compns. have improved melt flow rate and reduced fusion times, and the products formed from the filled polymer resins exhibit impact strength, tear strength, flexural modulus, loading level and tensile strength.

L13 ANSWER 2 OF 8 CAPLUS COPYRIGHT 2006 ACS on STN

AN 2005:74121 CAPLUS

DN 142:157516

TI Manufacture of blocked mercaptosilane coupling agents especially thiocarboxylic silane

IN Glatzer, Holger Jurgen; Raper, Beth Ann

PA General Electric Company, USA

SO PCT Int. Appl., 42 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2005007660	A1	20050127	WO 2003-US34737	20031030
				W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW	
	RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	AU 2003287405	A1	20050204	AU 2003-287405	20031030
	EP 1560836	A1	20050810	EP 2003-781640	20031030
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,				

## CAS ONLINE PRINTOUT

IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK  
 BR 2003015439 A 20050823 BR 2003-15439 20031030  
 US 2005245754 A1 20051103 US 2003-697919 20031030  
 CN 1735621 A 20060215 CN 2003-80108209 20031030  
 JP 2006505626 T2 20060216 JP 2005-504464 20031030  
 PRAI US 2002-423577P P 20021104  
 WO 2003-US34737 W 20031030  
 OS MARPAT 142:157516  
 AB Blocked mercaptosilanes can be manufactured by reacting mercaptosilanes with organic or inorg. halides or anhydrides in the presence of an acid acceptor (e.g. trialkylamine) and washing the resulting reaction product with H<sub>2</sub>O/brine to yield 2 immiscible phases, an organic phase containing blocked mercaptosilane product and an aqueous phase containing the salt of the acid acceptor. Recycle of the acid acceptor is achieved by adding base to the aqueous phase. The process is suitable to be run in either batch or continuous mode. The coupling agents may be used in rubber mixts.  
 RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 3 OF 8 CAPLUS COPYRIGHT 2006 ACS on STN  
 AN 2000:559882 CAPLUS  
 Correction of: 2000:274727  
 DN 133:143889  
 Correction of: 132:302342  
 TI Formation of magnetic fluid compositions  
 IN Borduz, Stefan; Borduz, Lucian; Tsuda, Shiro; Heckman, Kacey Wiley;  
 Hirota, Hirotake  
 PA Fellow Tech K. K., Japan  
 SO Jpn. Kokai Tokkyo Koho, 11 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2000124021	A2	20000428	JP 1998-306319	19981012
PRAI JP 1998-306319		19981012		
AB	Magnetic fluid compns. consist of magnetic particles, surfaces, organic dispersion media, and surface quality transforming agents or additives, and are chemical stable.			

L13 ANSWER 4 OF 8 CAPLUS COPYRIGHT 2006 ACS on STN  
 AN 2000:401981 CAPLUS  
 DN 133:39077  
 TI Method for efficiently immobilizing DNA on a carrier using new buffer compositions  
 IN Takayama, Masanori; Rokushima, Masatomo; Ueda, Minoru; Okamoto, Sachiko; Ozaki, Aya; Mineno, Junichi; Kimizuka, Fusao; Asada, Kiyozo; Kato, Ikunoshin  
 PA Takara Shuzo Co., Ltd., Japan  
 SO PCT Int. Appl., 45 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA Japanese

FAN.CNT 2

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2000034456	A1	20000615	WO 1999-JP6865	19991208
W:	AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,			

## CAS ONLINE PRINTOUT

MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK,  
 SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ,  
 BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,  
 DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,  
 CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

EP 1138761 A1 20011004 EP 1999-959690 19991208  
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
 IE, SI, LT, LV, FI, RO

PRAI JP 1998-351276 A 19981210  
 WO 1999-JP6865 W 19991208

AB A method is described for efficiently immobilizing DNA (e.g., oligonucleotide, polynucleotide) on a carrier (e.g., glass, quartz) by having a step of bringing the DNA into contact with the carrier in a buffer containing one or more substances selected from a group consisting of morpholine, morpholine derivative (e.g., N-alkyl morpholine), their salts and a carbonate (e.g., sodium carbonate, potassium carbonate, magnesium carbonate, ammonium carbonate, triethylammonium carbonate). An addition of a surfactant (e.g., nonionic surfactant, anionic surfactant, zwitterionic surfactant) to the buffer improves an efficiency of DNA immobilization. A larger amount of DNA can be immobilized on the carrier by this method with improved immobilization rate and immobilized DNA d. comparing to the conventional methods. An improved sensitivity is achieved in detecting a target DNA by hybridization using the immobilized DNA prepared by this method.

RE.CNT 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 5 OF 8 CAPLUS COPYRIGHT 2006 ACS on STN

AN 2000:274727 CAPLUS

DN 132:302342

TI Formation of magnetic fluid compositions

IN Borduz, Stefan; Borduz, Lucian; Tsuda, Shiro; Hickman, kasey Willi;  
 Hirota, Hirotake

PA Ferrotec Corporation, Japan

SO Jpn. Kokai Tokkyo Koho, 11 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI JP 2000124021 A2 20000428 JP 1998-306319 19981012

AB Magnetic fluid compns. consist of magnetic particles, surfactants, organic dispersion media, and surface quality transforming agents or additives, and are chemical stable.

L13 ANSWER 6 OF 8 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1997:442772 CAPLUS

DN 127:135951

TI Preparation of allyltrialkoxysilanes as resin modifiers or coupling agents

IN Kubota, Toru; Endo, Mikio; Numanami, Kazutoshi

PA Shin-Etsu Chemical Industry Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 4 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI JP 09157280 A2 19970617 JP 1995-317887 19951206

JP 3128192 B2 20010129

## CAS ONLINE PRINTOUT

PRAI JP 1995-317887 19951206  
 OS CASREACT 127:135951; MARPAT 127:135951  
 AB CH<sub>2</sub>:CHCH<sub>2</sub>Si(OR)<sub>3</sub> (R = C<sub>1-4</sub> alkyl), useful as resin modifiers or coupling agents (no data), are prepared by treating Cl<sub>3</sub>SiH with CH<sub>2</sub>:CHCH<sub>2</sub>X (X = Cl, Br, I) in the presence of tertiary amines and Cu compds. and successively treating the reaction solns. with ROH (R = C<sub>1-4</sub> alkyl). Cl<sub>3</sub>SiH was treated with allyl chloride in Et<sub>2</sub>O in the presence of Et<sub>3</sub>N and CuCl at 20-30° for 4 h and subsequently treated with MeOH at 50-60° for 3 h to give 77% allyltrimethoxysilane.

L13 ANSWER 7 OF 8 CAPLUS COPYRIGHT 2006 ACS on STN  
 AN 1994:166953 CAPLUS  
 DN 120:166953  
 TI Primers for  $\alpha$ -cyanoacrylate adhesives  
 IN Kaneoka, Kunio; Hosoya, Mitsuharu; Okamoto, Takanori; Matsuda, Hideaki  
 PA Okura Industrial Co Ltd, Japan  
 SO Jpn. Kokai Tokkyo Koho, 6 pp.  
 CODEN: JKXXAF

DT Patent  
 LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 05247412	A2	19930924	JP 1992-284045	19920928
PRAI	JP 1991-309969	A1	19911028		
OS	MARPAT 120:166953				

AB The title primers giving stable and high adhesion to  $\alpha$ -cyanoacrylate adhesives contain R<sub>1</sub>CO<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>NMe<sub>2</sub> (R<sub>1</sub> = C<sub>1-5</sub> alkyl, alkenyl) and/or NR<sub>2</sub>R<sub>3</sub>R<sub>4</sub> (R<sub>2</sub>-R<sub>4</sub> = alkyl, aralkyl; total C number of R<sub>2</sub>-R<sub>4</sub> 9-12), and optionally silane or titanate coupling agents. Thus, dimethylaminoethyl acetate was dissolved in Me<sub>2</sub>CO at 1.8% concentration to give a primer. Then, a pair of Takilon P 310 (polypropylene) pieces were immersed in the primer, dried, then bonded with Aron Alpha 201 ( $\alpha$ -cyanoacrylate adhesive) each other to give a sample specimen, which showed tensile shear strength (100 mm/min tensile rate) 58 kg/cm<sup>2</sup> (cohesive failure).

L13 ANSWER 8 OF 8 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1985:474906 CAPLUS  
 DN 103:74906  
 TI Cold-curing binder from polyurethane for foundry uses  
 IN Plumbaum, Klaus; De Ruyter, Michel Adrianus  
 PA Schuiling Metall Chemie B. V., Neth.  
 SO Ger. Offen., 18 pp.  
 CODEN: GWXXBX

DT Patent  
 LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 3339174	A1	19850515	DE 1983-3339174	19831028
	DE 3339174	C2	19870716		
	DE 3339174	C3	19950601		
PRAI	DE 1983-3339174		19831028		

AB The cold-setting binder contains a polyol mixture 10-20, polar solvent such as 3,5,5-trimethylcyclohexen-2-one [78-59-1] 5-25, apolar hydrocarbon solvent 5-20, benzenedicarboxylic acid esters such as dioctyl phthalate [117-81-7] 0-20, polyisocyanate with  $\geq 2$  isocyanite groups per mol [at mol ratio of polyol hydroxy groups to isocyanate groups 1:(0.8-1.5)] 25-45, and silanes (R<sub>10</sub>)<sub>3</sub>SiR 0-0.2% with R being alkyl, alkoxy, isocyanate-substituted, or C<sub>1-15</sub> alkylamino and R<sub>1</sub> hydrocarbon radical. The polyol mixture consists of 1,3-dihydroxybenzene 1-15, dihydroxybiphenyl

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10-25, trihydroxybiphenyl 20-40%, and balance condensation products of dihydroxybiphenyl and trihydroxybiphenyl with 1,3-dihydroxybenzene. The binder 0.5-10% is mixed with refractory sand (quartz, chromite, zircon, olivine, feldspars, and/or grog) and cold hardened with by dry air, N<sub>2</sub> or CO<sub>2</sub> containing a tertiary amine, or fluid catalyst. The cores and molds are made by mixing the sand with the polyol and polyisocyanate solns. or the polyol with the catalyst for storage. Advantages of the binder is unlimited storage or packaging of the polyol component, the storage temperature does not cause an undesired reaction, no environmental pollution since no free phenol or formaldehyde is contained, the amount of catalyst is reduced by ≤30%, and dimensional accuracy and high strength along with easy removal of the cores and molds are present. Thus, 30 g each of the polyol mixture and polyisocyanate solution were mixed with 3 kg dry quartz sand for 2 min to form core rods and cold hardened with dry air containing triethylamine [121-44-8] vapor. The 17% polyol solution consisted of 1,3-dihydroxybenzene 5, dihydroxybiphenyl 16, trihydroxybiphenyl 30, and condensation products of di- and trihydroxybiphenyl with 1,3-dihydroxybenzene 40, 3,5,5-trimethylcyclohexene-2-one 20, aromatic hydrocarbon solvent 13, and dioctylphthalate 7 weight%. The polyisocyanate solution contained 4,4'-diphenylmethyldiisocyanate (31% NCO) 44, dioctylphthalate 9, and aromatic hydrocarbon solvent 7 weight%. The bend strength of the core was 150 and 505 N/cm<sup>2</sup> as-prepared and held 24 h, resp. Previous storage of the sand mixture for 6 h prior to core forming did not affect greatly the core strength.

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